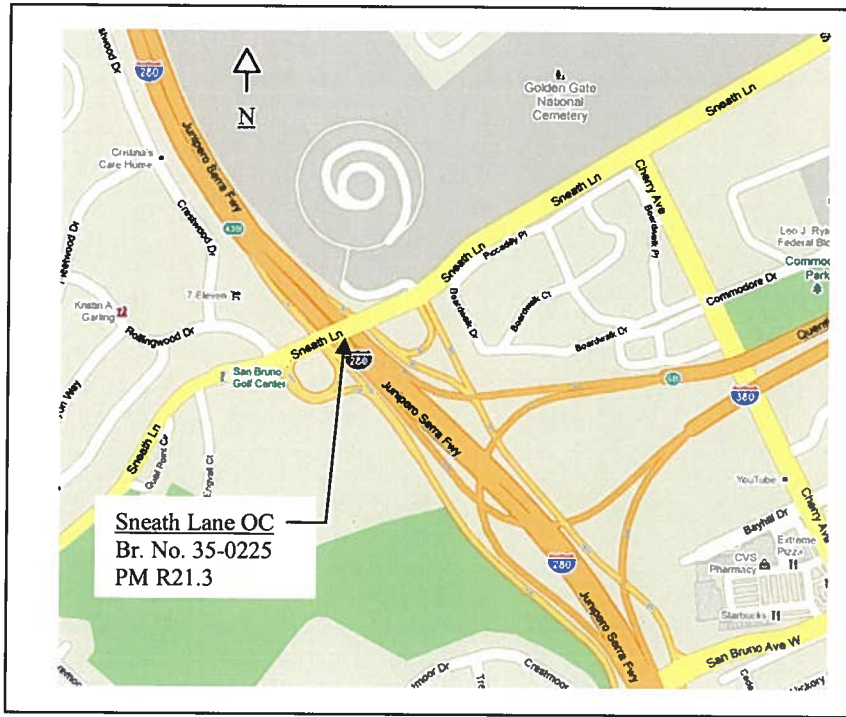


PROJECT SCOPE SUMMARY REPORT (Seismic Restoration)



On Route 280 in San Mateo County

In the City of San Bruno at PM R21.3

I have reviewed the right of way information contained in this Project Scope Summary Report-Seismic Retrofit and the R/W Data Sheet attached hereto, and find the data to be complete, current, and accurate:

MARK L. WEAVER

MARK WEAVER, DEPUTY DISTRICT DIRECTOR – RIGHT OF WAY AND LAND SURVEYS

APPROVAL
RECOMMENDED:

Patrick K. Pang
PATRICK K. PANG, PROJECT MANAGER

APPROVED:

Biyan Sartipi
BIYAN SARTIPI, DISTRICT DIRECTOR

9-16-11
DATE

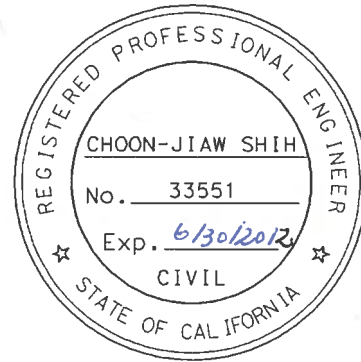
This Project Scope Summary Report-Seismic Restoration has been prepared under the direction of the following registered civil engineer. The registered civil engineer attests to the technical information contained herein and the engineering data upon which recommendations, conclusions, and decisions are based.

Choon-jiaw Shih

CHOON-JIAW SHIH, REGISTERED CIVIL ENGINEER

9/15/2011

DATE



Reviewed by:

Patrick K. Pang

PATRICK K. PANG
OFFICE CHIEF, ADVANCE PLANNING

9/15/11

DATE

PROJECT SCOPE SUMMARY REPORT (Seismic Restoration)

1. INTRODUCTION

This Project Scope Summary Report (PSSR) (Seismic Restoration) is being prepared to program, fund, and schedule a seismic retrofit project for the Sneath Lane Overcrossing (OC) (Br. No. 35-0225).

This project falls under the SHOPP Bridge Seismic Restoration Program (Code 201.113). The primary purpose of this program is to repair seismic deficiencies of existing bridges not identified in the Seismic Retrofit Phase I Program. This program is to provide bridge restoration when the restoration is primarily for seismic purposes. Bridges being upgraded or rehabilitated for other purposes, which also have a secondary seismic benefit, are to be covered by the initiating program.

2. RECOMMENDATION

Sneath Lane OC was determined to be potentially vulnerable during a seismic event. Seismic retrofitting would improve its resistance to expected earthquakes and minimize the potential for collapse. It is recommended that this project be programmed in the 2012 SHOPP (Program Code 201.113).

3. LOCATION AND PROBLEM

Sneath Lane OC is a concrete deck bridge located along I-280 at PM 21.3 in the City of San Bruno, San Mateo County. Sneath Lane connects I-280 and Route 35 (Skyline Blvd) to the west and I-280 and Route 82 to the east. The overcrossing was built in 1971 and carries two 12-foot wide lanes and 2-foot wide shoulder and a 6-foot wide sidewalk in each direction. It is 360 feet long, 67 feet 4 inches wide, and 4 feet 6 inches in depth. The bridge is a four-span structure consists of cast-in-place/prestressed box girders (9 cells) on reinforced concrete (RC) 2-column bents and RC diaphragm abutments. The bents are founded on 6.0-foot diameter concrete pile and the abutments are founded on 45-ton concrete piles. In March of 2007, the Office of Earthquake Engineering reviewed the inventory of state owned bridges for potential seismic vulnerabilities. As a result of this review, this bridge was found to be seismically deficient and was recommended for seismic retrofit.

4. PROPOSALS

The following work is recommended for Sneath Lane OC:

- Seismic Retrofit with steel casings fastening to all columns

- Re-enforce box girders with high-strength rods longitudinally and transversely through each cell

The detailed retrofit work is shown on the attached Advance Planning Study (APS) drawings (Attachment C) provided by Headquarters Division of Engineering Services, Office of Structure Design. Other work associated with the proposed retrofit includes, but is not limited to, the construction of soffit access openings for bays on each side of the bent caps and deck access opening from two ends of the bridge for installation of prestressed rods.

5. COST ESTIMATES

Preliminary project cost estimate summary: (See Attachment F for detailed cost estimate of the components.)

Roadway Work	\$ 504 K
Structure Work	\$ 664 K
R/W & Utilities	\$ 5 K
Total Cost Estimate	\$1173 K (current year 2011)

Escalation cost (annual inflation rate of 4% to mid-year construction-July 2014): \$1,320 K.

Project Support:

Proposed Program FY	District PY'S			Engineering Service Center PY'S					FY Total PY'S	Other Costs (\$)
				Structures		METs and Others		Office Engr		
	Design	R/W	Constr	Design	Constr	Design	Constr			
12/13	1.85	0.04		0.5					2.39	
13/14			0.4		0.4			0.16	0.96	
14/15			0.4		0.4			0.12	0.92	
TOTAL ESTIMATED PROJECT PY'S AND OTHER SUPPORT COSTS:									4.27	\$*

6. PROJECT SCHEDULE

Project milestone schedule is planned as follows:

PID/PAED	September	2011
Structure PS&E	February	2013
District PS&E	July	2013
R/W Certification	July	2013
RTL	October	2013
Construction Start	January	2014
Construction Completion	January	2015

Dates are tentative and subject to change due to project priorities and availability of funds from the SHOPP.

7. PROJECT FACTORS

Environmental:

This project is categorically exempt under Section 15061(b) (3), Class 1-C of the California Environmental Quality Act (CEQA) and Categorically Excluded under National Environmental Policy Act (NEPA). The Categorical Exemption/Exclusion Determination Sheet is included as Attachment D. One of the conditions of approval is to place exclusion nettings over the drainage holes on the bottom of the bridge structure three months before the start of any construction. In addition, any staging or storage area identified for construction use must be reviewed by the Biological Sciences and Permits Office to ensure the project will not affect any threatened or endangered species or any wetlands in the project area. The cost of compliance is included in the cost estimation.

Right of Way (R/W):

There is no additional right of way anticipated to for this project. A Right of Way Data Sheet dated April 5, 2011, is included in Attachment E.

Railroad:

There is no railroad involvement in this project.

Utilities:

Verification of utilities will be required. Potholing may be necessary if indicated by the results of the verification. However, no utility relocations are anticipated.

Traffic Control:

Any work adjacent to/over existing travel lanes will require traffic control which will include temporary lane closures, temporary railing (Type K) for shoulder closures, and a Traffic Management Plan.

Detours, one-way traffic control, ramp closures, and mainline lane closures will be required for installation of high strength rods within deck cells.

Water Quality:

A Storm Water Data Report was approved on May 3, 2011; the signature page is included in Attachment G.

Design Exceptions:

The existing bridge shoulder width is a nonstandard (2 feet) feature in accordance with the standards set forth in the *Highway Design Manual* (HDM).

HDM 208.1(b), Bridge Width, requires that the clear width of bridges shall equal the full width of the traveled way and paved shoulders on the approaches with the exception when the approach shoulder width is less than 4 feet, the minimum offset on each side shall be

4 feet. The existing approach pavement and the existing bridge deck are delineated without shoulders.

HDM 308.1, City Streets and County Roads, requires a local facility that crosses over or under a freeway and connects to a state facility (such as ramp terminal intersections), the minimum design standards for the cross section of the local facility shall be at least equal to those for a conventional highway with the exception that the outside shoulder width shall match the approach roadway, but not less than 5 feet.

To satisfy the above standards, the structure would need to be widened by 4 feet. Structure widening or replacement will not be proposed as it is beyond the scope of the Seismic Retrofit SHOPP program. Since this project will not create any permanent impact on the geometric design, a *Memo to File* was prepared in lieu of a *Fact Sheet Exception to Mandatory Design Standards* to document the above exception and it was approved by the Michael W. Thomas, Design coordinator for Division of Design, on September 1, 2011.

Risk Management:

Possible risks to the completion of the project are indicated in the Risk Management Plan (Attachment I). There is a low risk that biological mitigation areas will be identified. If this happens, then the project location will need to undergo cultural resources review and limited construction window might have to be established, and thus result in project delay. There is also a medium risk about the objections of the community to the lane closure during weekdays. If that happens, it might be necessary for lane closures during construction to take place at night or on weekends.

Transportation Management Plan (TMP):

Transportation Management Plan Data Sheet was signed on January 7, 2011 and is included in Attachment J. A TMP for the project will be developed and refined during the PS&E and be supported by detailed traffic studies to evaluate traffic operations. The need for necessary lane/ramp closures during off-peak hours or at night will be identified, as required. The TMP will include press releases to notify and inform motorists, business, community groups, local entities, emergency services, and politicians of upcoming closures or detours. Various TMP elements, such as portable Changeable Message Signs and CHP Construction Zone Enhanced Enforcement Program, may be utilized to alleviate and minimize delay to the traveling public.

Landscaping:

Landscaping removed for the construction of this project will be replaced.

Value Analysis:

Since total project cost is below \$25 million, a value analysis is not deemed necessary in this phase.

Title IV Considerations:

The California Department of Transportation, under Title VI of the Civil Rights Act of 1964 and related statutes, ensures that no person in the State of California shall, on the grounds of

race, color, national origin, sex, disability, and age, be excluded from participation in, be denied the benefits of, or be otherwise subjected to discrimination under any program or activity it administers.

Most of the movement in the project area involves the use of motorized vehicles. There are no locations within the area that are designated as an access facility for handicapped or non-motorized vehicles. As such, it is not expected that the proposed work will impact any of these types of facilities.

8. PROJECT FUNDING

It is proposed that this project be funded from the 2012 SHOPP Bridge Seismic Restoration Program (201.113), following PSSR approval. The estimated construction capital cost for this project is \$1,168,000 and the R/W cost is \$5,000.

9. PROJECT PERSONNEL

Patrick K. Pang (510) 286-5566
Office Chief, Office of Advance Planning

Robert Blanco (510) 286-5676
Branch Chief, PSR II, Office of Advance Planning

Choon-Jiaw Shih (510) 622-1666
Project Engineer, Office of Advance Planning

Fuk Nyan Kurniawan (510) 286-5213
Branch Chief, Office of Maintenance & Toll Bridge Engineering

Majid Madani (916) 227-8366
HQ Technical Liaison Engineer, DES Structure Design

Takako Fujioka, (916) 227-8120
HQ Bridge Program Advisor, DES Structure Maintenance & Investigations

Howell Chan (510) 286-5623
Branch Chief, Environmental Analysis

10. PROJECT REVIEWS

In addition to reviews performed by the following staff, this document was circulated in draft form to appropriate functional units and Headquarters staff on June 10, 2011.

Patrick K. Pang (510) 286-5566

Office Chief, Office of Advance Planning

Robert Blanco (510) 286-5676
Branch Chief, PSR II, Office of Advance Planning

Majid Madani (916) 227-8366
Structures Technical Liaison Engineer, DES Division of Structure

Fuk Nyan Kurniawan (510) 286-5213
SHOPP HM3 & 115 Bridge Program Advisor, Maintenance and Toll Bridge Engineering

Tatako Fujioka (916) 227-8120
HQ Bridge Program Advisor, Structure Maintenance and Investigation

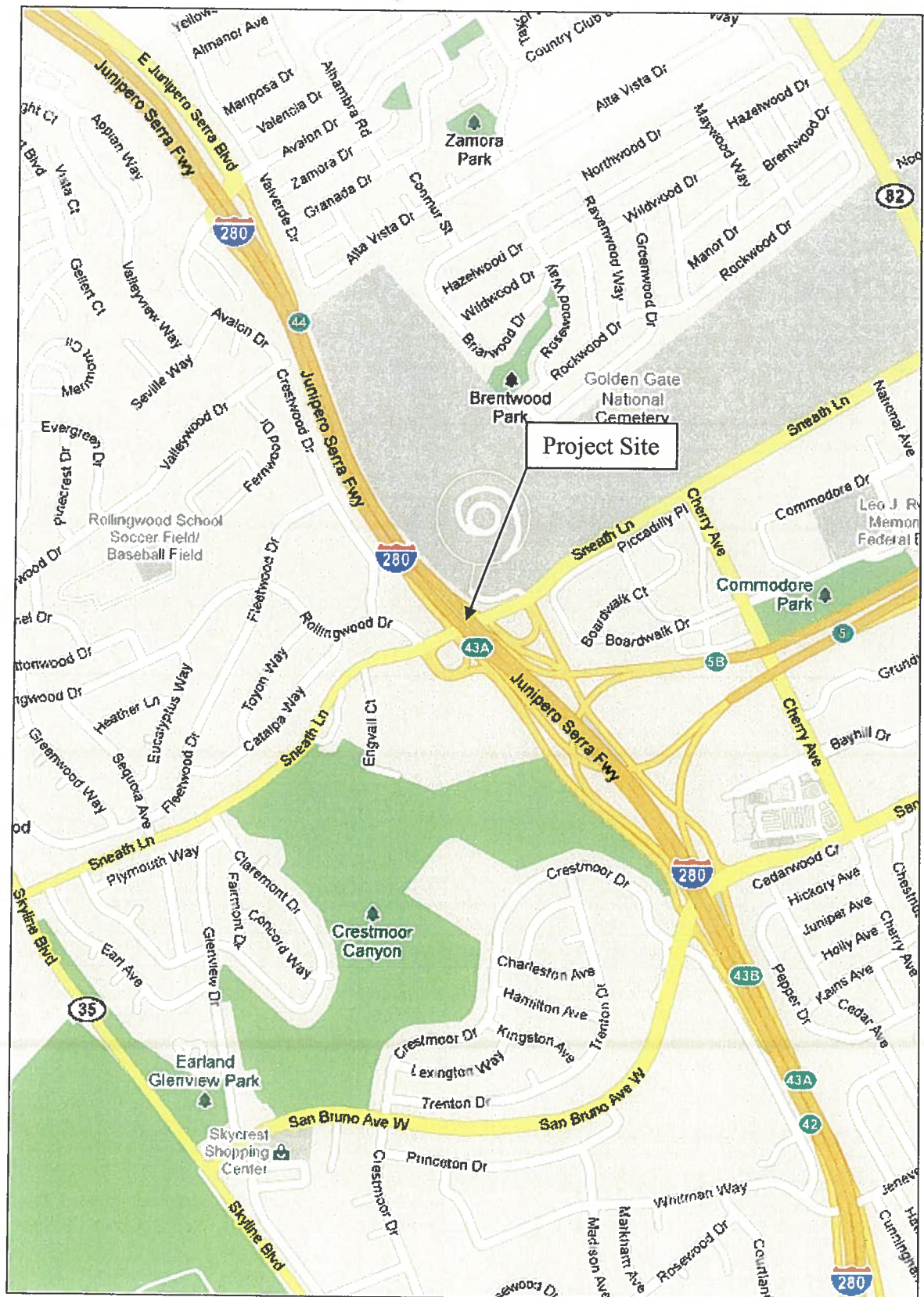
Larry Moore (916) 653-2647
HQ Design Reviewer, Division of Design

11. LIST OF ATTACHMENTS

Attachment A	Project Map
Attachment B	Aerial Photos
Attachment C	Advance Planning Studies (APS)
Attachment D	Categorical Exemption/Exclusion Determination Sheet
Attachment E	Right of Way Data Sheet
Attachment F	Preliminary Project Cost Estimate
Attachment G	Storm Water Data Report (SWDR)
Attachment H	Strain and BIRIS Reports
Attachment I	Risk Management Plan
Attachment J	Transportation Management Plan (TMP) Data Sheet

Attachment A

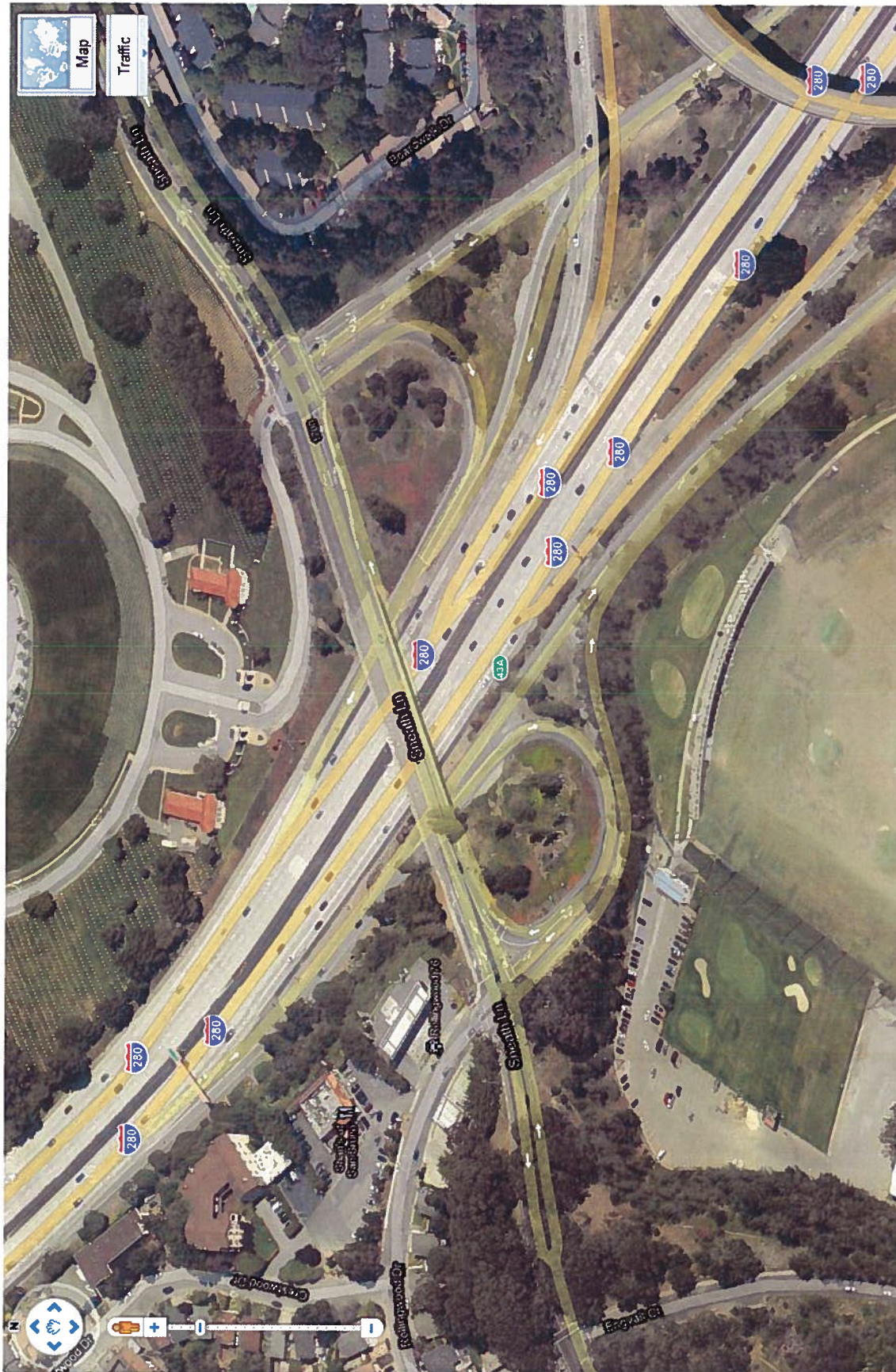
Project Map



PROJECT MAP for Sneath Lane OC Seismic Retrofit
City of San Bruno, SM-280 PM R21.3

Attachment B

Aerial Photo



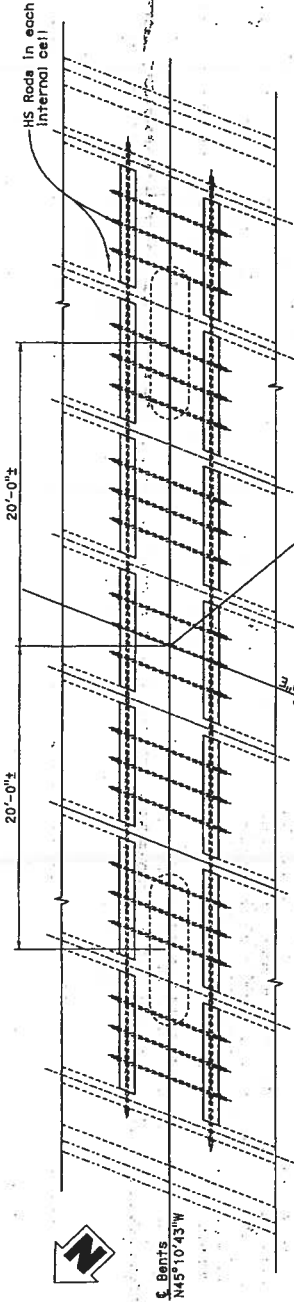
Attachment C

Advance Planning Study (APS)

DIST	COUNTY	ROUTE	POST MILE
04	SM	280/186	

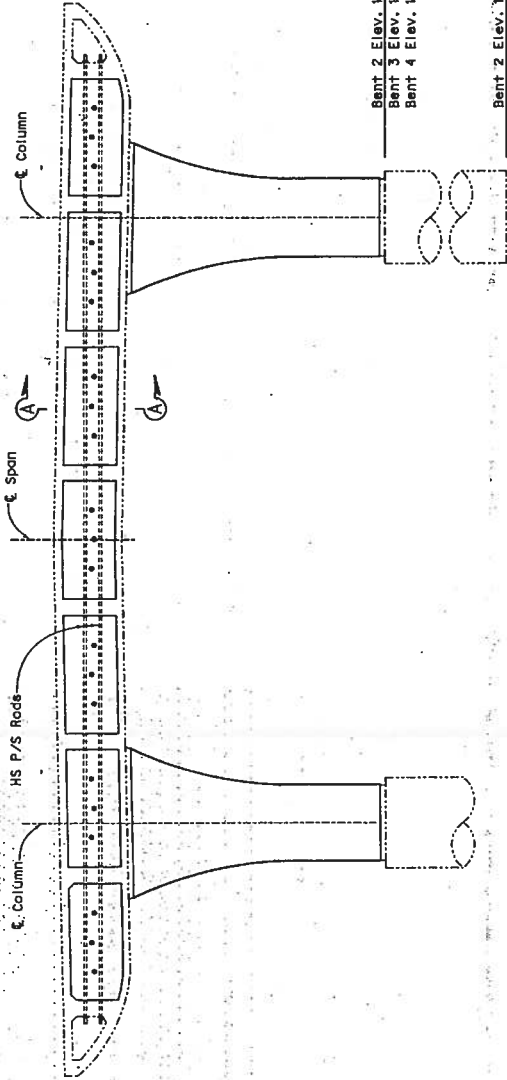
LEGEND:

— Indicates Existing structure
 --- Indicates New Construction



Bent 2 Sta. 283+09.07
 Bent 3 Sta. 284+14.07
 Bent 4 Sta. 285+19.07

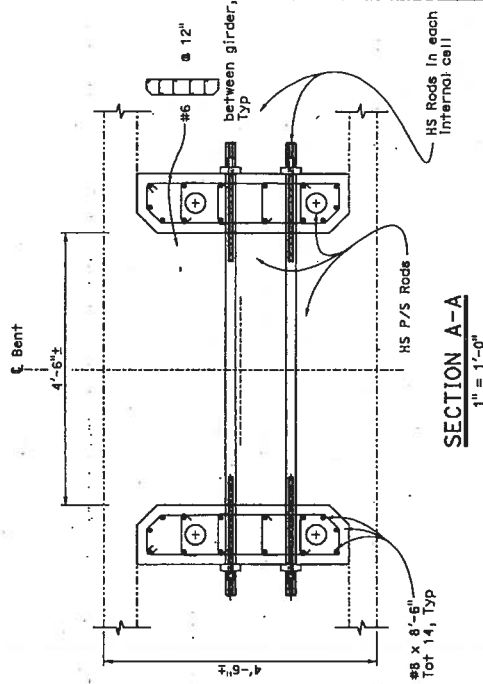
PLAN
 1/4" = 1'-0"



ELEVATION
 1/4" = 1'-0"

Bent 2 Elev. 185.00±
 Bent 3 Elev. 183.00±
 Bent 4 Elev. 181.00±

Bent 2 Elev. 160.00±
 Bent 3 Elev. 155.00±
 Bent 4 Elev. 150.00±



SECTION A-A
 1" = 1'-0"

SHEET 2 OF 2

DESIGNED BY	DATE	STRUCTURE	PLANNING STUDY
Ward Kyo	07/12/10	DESIGN	
DRAWN BY	DATE	BRANCH	
Carlo Corcino	07/12/10		
CHECKED BY	DATE		
Brion Marj	07/12/10		
APPROVED	DATE		
Brion Marj	07/12/10		

8

SNEATH LANE OVERCROSSING

BRIDGE NO. 35-225

CU 04

EA 06710K

FILE: \\gbl-servers\lms\lms-bent.dgn

STRUCTURE DESIGN ADVANCE PLANNING STUDY SHEET (SMBL) (REV. 10/25/05)

A diagram consisting of two arrows pointing in opposite directions. The top arrow points upwards and contains the word "OUTPUT". The bottom arrow points downwards and contains the word "INPUT".

The Assumption Curves, unless noted otherwise, are modeled with a triangular distribution with the "Minimum, Likeliest and Maximum values."

[illegible]

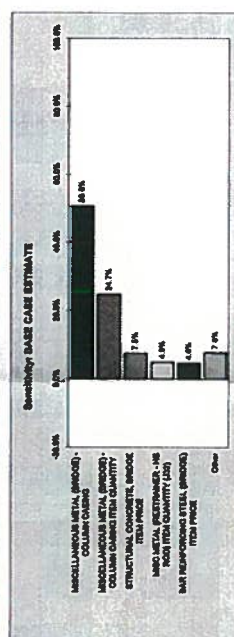
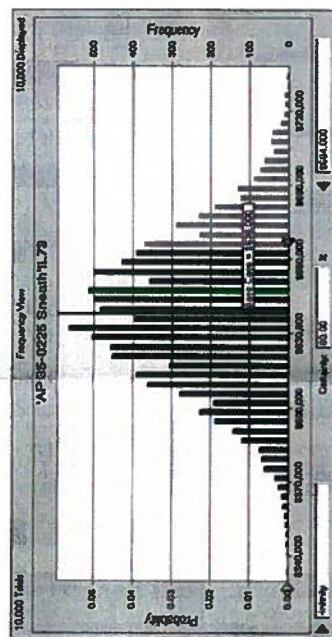
ROUTING	COMMENTS	REVISED CONCRETE UNIT PRICE FROM PREVIOUS		
1. DES SECTION				
2. OFFICE OF BRIDGE DESIGN - NORTH				
3. OFFICE OF BRIDGE DESIGN - CENTRAL				
4. OFFICE OF BRIDGE DESIGN - WEST				
5. OFFICE OF BRIDGE DESIGN - SOUTH 1				
6. OFFICE OF BRIDGE DESIGN - SOUTH 2				
SUBTOTAL			\$417,435	
TIME RELATED OVERHEAD			\$41,743	
MOBILIZATION (@ 10 %)			\$51,020	
SUBTOTAL BRIDGE ITEMS			\$510,198	
CONTINGENCIES (@ 25%)			\$127,549	
BRIDGE TOTAL COST			\$637,747	
COST PER SQ. FOOT			\$26.24	
BRIDGE REMOVAL (CONTINGENCIES INCL.)				
WORK BY RAILROAD OR UTILITY FORCES				
GRAND TOTAL			\$637,747	
BASELINE ESTIMATE TO MIDPOINT OF CONSTRUCTION				\$439,000

Highlighted cells represent the quantities and prices that are included in the model.
 Base Case Estimate is the sum of the "Labeled" Quantity multiplied by "Labeled" Item Price

Notes

Highlighted cells represent the quantities and prices that are included in the model. Base Case Estimate is the sum of the "Likeliest" Quantity multiplied by "Likeliest" Item Price

The estimate ranges generated below were prepared using Crystal Ball software, which automatically calculates and records the results of thousands of different "what if" cases. Analysis of these scenarios reveals to you the range of possible outcomes, their probability of occurring, the inputs that most impact your model, and where you should focus your efforts.



BASED ON THE ASSUMPTIONS USED TO
CREATE THE MODEL, THE DES-
STRUCTURE COST ESTIMATES BRANCH
RECOMMENDS THAT THE PROGRAMMING
LEVEL BUDGET FOR THIS PROJECT BE
DESIGNATED AT THE 80% FORECAST
VALUE.

80% FORECAST VALUE = \$664,000.00

Years Beyond Midpoint	Escalation Rate	Budget Est.	Escalated Budget
1	2.1%	\$679,000	\$695,000
2	3.0%	\$699,000	\$727,000
3	4.0%	\$727,000	\$775,000
4	3.6%	\$775,000	\$807,000
5	2.7%	\$807,000	\$839,000

3 Escalated structure cost is provided for information only, actual construction costs may vary. Escalated structure costs provided do not replace Departmental policy to update cost estimates annually. Escalation rate used are based on Global Insight data noted at <http://www.doi.gov/bo/moredcostest/data.htm>

Attachment D

Categorical Exemption/
Categorical Exclusion

CATEGORICAL EXEMPTION/ CATEGORICAL EXCLUSION DETERMINATION FORM

04-SM-280	R21.3	0G710K	040001988
Dist.-Co.-Rte. (or Local Agency)	P.M/P.M.	E.A. (State project)	Federal-Aid Project No. (Local project)/ Proj. No.

PROJECT DESCRIPTION:

The scope of the project involves seismic retrofit of an overcrossing at Sneath Lane on Route 280 in San Mateo County at Post Miles R-21.3. The scope of work is to put new column casings (six columns in total) to strengthen the structure. There will be additional structural elements mostly iron bars longitudinally and transversely put in under the bridge deck to retrofit the structure. No ground disturbance is anticipated for this project.

CEQA COMPLIANCE (for State Projects only)

Based on an examination of this proposal, supporting information, and the following statements (See 14 CCR 15300 et seq.):

- If this project falls within exempt class 3, 4, 5, 6 or 11, it does not impact an environmental resource of hazardous or critical concern where designated, precisely mapped and officially adopted pursuant to law.
- There will not be a significant cumulative effect by this project and successive projects of the same type in the same place, over time.
- There is not a reasonable possibility that the project will have a significant effect on the environment due to unusual circumstances.
- This project does not damage a scenic resource within an officially designated state scenic highway.
- This project is not located on a site included on any list compiled pursuant to Govt. Code § 65962.5 ("Cortese List").
- This project does not cause a substantial adverse change in the significance of a historical resource.

CALTRANS CEQA DETERMINATION

☐ Exempt by Statute. (PRC 21080[b]; 14 CCR 15260 et seq.)

Based on an examination of this proposal, supporting information, and the above statements, the project is:

☒ **Categorically Exempt. Class 1.** (PRC 21084; 14 CCR 15300 et seq.)

☐ **Categorically Exempt. General Rule exemption.** [This project does not fall within an exempt class, but it can be seen with certainty that there is no possibility that the activity may have a significant effect on the environment (CCR 15061[b][3])]

Howell Chan

Print Name: Environmental Branch

Chief

Signature

Date

Patrick Pang

Print Name: Project Manager/DLA

Engineer

Signature

Date

NEPA COMPLIANCE

In accordance with 23 CFR 771.117, and based on an examination of this proposal and supporting information, the State has determined that this project:

- does not individually or cumulatively have a significant impact on the environment as defined by NEPA and is excluded from the requirements to prepare an Environmental Assessment (EA) or Environmental Impact Statement (EIS), and
- has considered unusual circumstances pursuant to 23 CFR 771.117(b) (<http://www.fhwa.dot.gov/hep/23cfr771.htm> - sec.771.117).

In non-attainment or maintenance areas for Federal air quality standards, the project is either exempt from all conformity requirements, or conformity analysis has been completed pursuant to 42 USC 7506(c) and 40 CFR 93.

CALTRANS NEPA DETERMINATION (Check one)

☒ **Section 6004:** The State has been assigned, and hereby certifies that it has carried out, the responsibility to make this determination pursuant to Chapter 3 of Title 23, United States Code, Section 326 and a Memorandum of Understanding (MOU) dated June 7, 2007, executed between the FHWA and the State. The State has determined that the project is a Categorical Exclusion under:

- 23 CFR 771.117(d): activity (d)(5)
- Activity listed in the MOU between FHWA and the State *Appendix A, 5*

☐ **Section 6005:** Based on an examination of this proposal and supporting information, the State has determined that the project is a CE under Section 6005 of 23 U.S.C. 327.

Howell Chan

Print Name: Environmental Branch

Chief

Signature

Date

Patrick Pang

Print Name: Project Manager/DLA

Engineer

Signature

Date

CATEGORICAL EXEMPTION/CATEGORICAL EXCLUSION DETERMINATION FORM
Continuation Sheet

04-SM-280

R21.3

0G710K

0400001988

Dist.-Co.-Rte. (or Local
Agency)

P.M/P.M.

E.A. (State
project)

Federal-Aid Project No. (Local project)/
Proj. No.

Conditions of Approval:

Office of Biological Sciences and Permits:

This project will not require any biological permits.

However these are the constraints that need to be strictly followed during construction.

1. Must place exclusion netting over the drainage holes on the bottom of the bridge structure three months before the start of any construction. Funds need to be allocated for the maintenance of the netting during the construction.
2. Any staging or storage area identified for the construction of the project must be reviewed by the Biological Sciences and Permits Office to ensure the project will not affect any threatened or endangered species or any wetlands in the project area. The Resident Engineer shall contact the biological monitor no later than 3 days prior to the start of construction-related activities.

Office of Water Quality, Erosion Control and Environmental Mitigation Branch:

No permits for water quality are needed for the project. Standard BMPs are recommended for the project.

Office of Cultural Resources Studies:

The project has no potential effect on cultural resources.

Office of Environmental Engineering:

Hazardous Waste Material:

1. The project will involve minimal soil disturbance in the unpaved area. No soil testing is required for the project.

SUMMARY OF REQUIRED PERMITS AND ENVIRONMENTAL COMMITMENT -PS&E PHASE

TO: Robert Blanco
ATTN.: Choon-Jiaw Shih
OFFICE: Adv Planning

PROJECT MANAGER: TBD
PROJECT ENGINEER: TBD
DESIGN OFFICE: TBD

DATE:	30-Aug-11
CO. RTE.	SM-280
EA:	0G710K
P.N.	400001988
P.M.	R21.3

Below is a summary of the required permits, and environmental commitments that must be incorporated into the PS&E, for this project. Please contact: Wahida Rashid @ 6-5935 for further information.

COMMITMENTS		NSSP Y/N	Responsible Staff	Timing	Action Taken	Date
	Require placement of exclusion netting over the drainage holes to prevent use by birds or bats as habitat.	Y	Ryan Graybehl @6-6071	PS&E Phase		
	Require netting to be placed three months prior to construction.	Y	Ryan Graybehl @6-6071	PS&E Phase		
	Identify all staging and storage areas. Have functional units assess any areas not previously studied. Prepare re-validation as necessary.	Y	Wahida Rashid @6-5935	PS&E Phase		
	Ensure requirement for temporary BMPs are included in PS&E and are in place before commencement of project's construction-related activities	Y	Kamran Nakhjiri @6-5664	PS&E and Const. Phases		
	Require pre-construction survey for listed birds including Swainson's hawk or their nests in the surrounding trees.		Ryan Graybehl @6-6071	Const. Phase	May be included as directions in RE file rather than as an NSSP.	
	Require restoration of areas in the appropriate season following project construction at that location.	Y	Ryan Graybehl @6-6071	PS&E Phase		
	RWQCB NPDES requirements	Y	Kamran Nakhjiri @6-5664	PS&E Phase		

A copy of the project PS&E must be sent to Environmental for review before finalization.

☐ Attachments

cc: Design, Senior Envir. Plan., File

for

OFFICE CHIEF OF ENVIRONMENTAL PLANNING

Howell Chan

30 Aug 2011

Attachment E

Right of Way Data Sheet

T0: Office of Advance Planning

Date April 6, 2011
Dist 4 Co SM Rte 280 PM R21.3

Attention: Robert Blanco
Branch Chief

EA 0G710K

From: ENID LAU
Right of Way Resource Manager

Sneath Lane Overcrossing Seismic
Retrofit

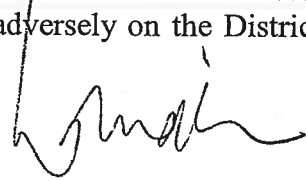
D.S. #5901

Subject: Current Estimated Right of Way Costs

We have completed an estimate of the right of way costs for the above referenced project based on maps we received from you on March 11, 2011 and the following assumptions and limiting conditions.

- ☐ 1. The mapping did not provide sufficient detail to determine the limits of the right of way required.
- ☐ 2. The transportation facilities have not been sufficiently designed so our estimator could determine the damages to any of the remainder parcels affected by the project.
- ☐ 3. Additional right of way requirements are anticipated, but are not defined due to the preliminary nature of the early design requirements.
- ☐ 4. This estimate does not include \$ _____ right of way costs previously incurred on the project, which may affect the total project right of way costs for programming purposes.
- ☐ 5. We have determined there are no right of way functional involvements in the proposed project at this time, as designed.

Right of Way Lead Time will require a minimum of 6 months after we begin receiving final right of way requirements (PYPSCAN node No. 224), necessary environmental clearance has been obtained, and freeway agreements have been approved. From the date of receipt of final right of way requirements (PYPSCAN node No. 265), we will require a minimum of 4 months prior to the date of certification of the project. Shorter lead times will require either more right of way resources or an increased number of condemnation suits to be filed. Either of these actions may reflect adversely on the District's other programs or our public image generally.



Right of Way Resource Manager

Attachments:

- ☒ Right of Way Data Sheet – Page One (always required)
- ☒ Right of Way Data Sheet – All Pages (required when interest in real property is being acquired)
- ☒ Utility Information Sheet
- ☐ Railroad Information Sheet

RIGHT OF WAY DATA SHEET

TO: Office of Advance Planning,
PSR II

Date 3/30/2011 D.S. # 5901
Dist. 04 Co. SM Rte 280 PM 21.3
EA 04-0G710K (0400001988)
Project Description: Seismic Retrofit

ATTN: ROBERT BLANCO

SUBJECT: Right of Way Data - Alternate No. _____

1. Right of Way Cost Estimate:

	Current Value (Future Use)	Escalation Rate	Escalated Value
A. Acquisition, including Excess Lands, Damages, and Goodwill	\$ <u>\$0.00</u>	%	\$ <u>\$0.00</u>
Project Permit Fees			\$ <u>\$0.00</u>
Grantor's Appraisal Cost			\$ <u>\$0.00</u>
B. Utility Relocation (State Share)	\$ <u>\$5,000.00</u>	%	\$ <u>\$5,000.00</u>
C. Railroad (from page 6)			\$ <u>\$0.00</u>
D. Relocation Assistance	\$ <u>\$0.00</u>	%	\$ <u>\$0.00</u>
E. Clearance Demolition	\$ <u>\$0.00</u>	%	\$ <u>\$0.00</u>
F. Title and Escrow Fees	\$ <u>\$0.00</u>	%	\$ <u>\$0.00</u>
G. <u>TOTAL ESCALATED VALUE</u>			\$ <u>\$5,000.00</u>
H. Construction Contract Work	\$ <u>\$0.00</u>		

2. Anticipated Date of Right of Way Certification _____

3. Parcel Data:

Type	Dual/Appr	Utilities	RR Involvements
X _____		U4-1 _____	None _____ X
A _____		-2 _____	C&M Agrmt _____
B _____		-3 _____	Svc Cont. _____
C _____		-4 _____	Design _____
D _____		U5-7 <u>6</u>	Const. _____
E <u>XXXX</u>		-8 _____	Lic/RE/Clauses _____
F <u>XXXX</u>		-9 _____	

Total 0

Misc R/W Work

RAP Displ	<u>0</u>
Clear Demo	<u>0</u>
Const. Permits	<u>0</u>
Condemnation	<u>0</u>

as: Right of Way

Enter PMCS Screens 4/1/11

Enter AGRE Screen (Railroad Data Only) _____

No. Excess Parcels _____

By [Signature]

Excess _____

By _____

4. Are there any major items of construction contract work?
Yes ☐ No ☒ (If yes, explain)
5. Provide a general description of the right of way and excess lands required(zoning, use, major improvements critical or sensitive parcels, etc.).
No right of way required. ☒
6. Is there an effect on assessed valuation? (If yes explain)
Yes ☐ Not Significant ☐ No ☒
7. Are utility facilities or rights of way affected? Yes ☒ No ☐
If yes, attach Utility Information Sheet Exhibit 01-01-05)
8. Are railroad facilities or rights of way affected? Yes ☐ No ☒
If yes, attach Railroad Information Sheet Exhibit 01-01-06)
9. Were any previously unidentified sites with hazardous waste and/or material found?
Yes ☐ None evident ☒
(If yes, attach memorandum per Procedural Handbook Volume 1, Section 101.011)
10. Are RAP displacements required? Yes ☐ No ☒
(If yes, provide the following information)
- No. of single family _____ No. of business/non profit _____
No. of multi-family _____ No. of farms _____
- Based on Draft / Final Relocation Impact Statement / Study dated _____, it is anticipated that sufficient replacement housing will / will not be available without Last Resort Housing.
11. Are material borrow and / or disposal sites required? Yes ☐ No ☒
(If yes, explain)
12. Are there potential relinquishments / abandonments? Yes ☐ No ☒
(If yes, explain)
13. Are there any existing and/or potential Airspace sites? Yes ☐ No ☒
(If yes, explain)

14. Are there Environmental Mitigation costs? Yes ☐ No ☒
(If yes, explain)
15. Indicate the anticipated Right of Way schedule and lead time requirements. (Discuss if District proposes less than PMCS lead time and / or if significant pressures for project advancement are anticipated.)

PYPSCAN lead time (from Regular R/W to project certification) 6 months.

16. Is it anticipated that all Right of Way work be performed by CALTRANS staff?
Yes ☒ No ☐ (If no, discuss)

Assumptions and Limiting Conditions

- This data sheet was completed without a hazardous waste/materials report.
- Information on this data sheet was based on maps provided by Robert Blanco on March 11, 2011.

Evaluation Prepared By: Renata Frey

Right of Way: Name Renata Frey Date 3/30/11

Railroad: Name Port of LA Date 3-30-11

Utilities: Name [Signature] Date 3/30/11

Recommended for Approval:

[Signature]

Right of Way Capital Cost Coordinator

I have personally reviewed this Right of Way Data Sheet and all supporting information. It is my opinion that the probable Highest and Best Use, estimated values, escalation rates, and assumptions are reasonable and proper subject to the limiting conditions set fourth, and find this Data Sheet complete and current.

[Signature]

Chief, R/W Appraisal Services

4/5/11

Date

cc: Program Manager
Project Manger

UTILITY INFORMATION SHEET

1. Utility owners located within project limits:
Sewer, water, gas, electric, telephone, cable
2. Facilities potentially impacted by project (if known, include Owners(s) & facility type(s)):
3. Anticipated Workload:

<u> X </u>	Utility Verification required
<u> X </u>	Positive Identification
<u> </u>	Utility Relocation
<u> </u>	Other (Specify)
4. Additional information concerning anticipated utility involvements (include limiting conditions and a narrative addressing likelihood that conflicts will occur);

 Involves possible relocation of electric transmission facilities
(If X'd, Data sheet should be forwarded to environmental)

5. PMCS input information

U4-1	<u> </u>	Owner Expense Involvements
U4-2	<u> </u>	State Expense Involvements (Conventional, No Fed Aid)
U4-3	<u> </u>	State Expense Involvements (Freeway, No Fed Aid)
U4-4	<u> </u>	State Expense Involvements (Conventional or Freeway, Fed Aid)
U5-7	<u> 6 </u>	Verifications - without involvements
U5-8	<u> </u>	Verifications - 50% involvements
U5-9	<u> </u>	Verifications resulting in involvements

NOTE: The sum of U-4's must equal the sum of 1/2 of the U5-8's and all of the U5-9's.

ESTIMATED STATE SHARE OF COSTS \$ 5,000 (reserved for potholing)

Prepared by: Elizabeth Engle

Elizabeth Engle
Right of Way Utility Coordinator

3/30/11
Date

Attachment F

Preliminary Project Cost Estimate

PRELIMINARY PROJECT COST ESTIMATE SUMMARY

District-County-Route 04-SM-280

PM R21.3

EA 0G710K

Program Code SHOPP 201.113

PROJECT DESCRIPTION: Seismic Retrofit on Sneath Lane OC

Limits: On Interstate 280 in the City of San Bruno

Proposed Improvement (Scope): Retrofit Column and Box Girder

SUMMARY OF PROJECT COST ESTIMATE

TOTAL ROADWAY ITEMS \$ 504,000

TOTAL STRUCTURE ITEMS \$ 664,000

SUBTOTAL CONSTRUCTION COSTS \$ 1,168,000

TOTAL RIGHT OF WAY ITEMS \$ 5,000

TOTAL PROJECT CAPITAL OUTLAY COSTS \$ 1,173,000

Reviewed by: Fuk Nyan Kurniawan, Program Advisor (Signature) Date: _____

Approved by Patrick K. Pang, Project Manager (Signature) Date: _____

Program Code: SHOPP 201.113

PRELIMINARY PROJECT COST ESTIMATE SUMMARY

DIST-CO-RTE: 04-SM-280

PM: R21.3

EA: 0G710K

Program Code: SHOPP 201.113

Section 4- Specialty Items

	Quantity	Unit	Unit Price	Item Cost	Section Cost
Retaining Walls					
Noise Barriers					
Barriers and Guardrails	1	LS		\$ 50,000	
Equipment/Animal Passes					
Water Pollution Control				\$ 10,000	
Hazardous Waste Investigation and/or Mitigation Work	1	LS		\$ 10,000	
Environmental Compliance	1	LS		\$ 10,000	
Resident Engineer Office Space					
Place AC (Miscellaneous Area)					
Remove MGBR					
Remove AC Dike					
Concrete Barriers (Type 60)					
Temporary Railing (Type K)					
Crash Cushion (Adiem)					
Electrical/Safety/Support Work					
Permanent Erosion Control					
Prepare Storm Water Pollution Prevention Plan (SWPPP)					

***Subtotal Specialty Items* \$ 80,000**

Section 5 - Traffic Items

	Quantity	Unit	Unit Price	Item Cost	Section Cost
Lighting					
Traffic Delineation Items				\$ 10,000	
Traffic Signals					
Overhead Sign Structures					
Roadside Signs					
Traffic Control Systems	1	LS		\$ 60,000	
Transportation Management Plan	1	LS		\$ 80,000	
Temporary Detection System					
Staging	1	LS		\$ 36,000	
Constuction Area Signs	1	LS		\$ 20,000	

***Subtotal Traffic Items* \$ 206,000**

PRELIMINARY PROJECT COST ESTIMATE SUMMARY

DIST-CO-RTE: 04-SM-280

PM: R21.3

EA: 0G710K

Program Code: SHOPP 201.113

Section 6 - Planting and Irrigation

	Quantity	Unit	Unit Price	Item Cost	Section Cost
Highway Planting					
Replacement Planting					
Irrigation Modification					
Relocate Existing Irrigation					
Facilities					
Irrigation Crossovers					
<i>Subtotal Planting and Irrigation</i>					\$ -

Section 7 - Roadside Mgmt & Safety Section

	Quantity	Unit	Unit Price	Item Cost	Section Cost
Vegetation Control Treatments					
Gore Area Pavement					
Pavement beyond the gore area					
Miscellaneous Paving					
Erosion Control					
Slope Protection					
Side Slopes/Embankment Slopes					
Maintenance Vehicle Pull outs					
Off-freeway Access (gates, stairways, etc.)					
Roadside Facilities (Vista Points, Transit, Park and Ride, etc.)					
Relocating roadside facilities/features					
<i>Subtotal Roadside Mgmt & Safety Section</i>					\$ -

TOTAL OF SECTIONS 1 thru 7 \$ 316,000

Section 8 - Minor Items

				Unit Cost	Section Cost
Subtotal Section 1-5	\$	316,000	x 10% =	\$ 31,600	
<i>Subtotal Minor Items</i>					\$ 31,600

Program Code: SHOPP 201.113

PRELIMINARY PROJECT COST ESTIMATE SUMMARY

DIST-CO-RTE: 04-SM-280

PM: R21.3

EA: 0G710K

Program Code: SHOPP 201.113

II. STRUCTURES ITEMS

	Cost			
	Structure 1	Structure 2	Structure 3	Structure 4
Bridge Name				
Structure Type				
Width (out to out) - (ft)				
Span Lengths - (ft)	<u>\$0</u>	<u>\$0</u>	<u>\$0</u>	<u>\$0</u>
Total Area - (ft2)	<u>\$0</u>	<u>\$0</u>	<u>\$0</u>	<u>\$0</u>
Footing Type (pile/spread)	<u>\$0</u>	<u>\$0</u>	<u>\$0</u>	<u>\$0</u>
Cost Per ft2	<u>\$0</u>	<u>\$0</u>	<u>\$0</u>	<u>\$0</u>
(incl. 10% mobilization and 20% contingency)	<u>\$0</u>	<u>\$0</u>	<u>\$0</u>	<u>\$0</u>
<i>Total Cost for Structure</i>	<i>\$0</i>	<i>\$0</i>	<i>\$0</i>	<i>\$0</i>

* - Includes 10% mobilization and 25% contingency

Subtotal Structures Items \$0

Railroad Related Costs \$0

Subtotal Railroad Items \$0

***TOTAL STRUCTURES ITEMS - \$ 664,000 (From APS)**
(Sum of Structures plus Railroad Items)

Comments:

* This amount is the total cost of structures including 10% mobilization and 25% contingency.

PRELIMINARY PROJECT COST ESTIMATE SUMMARY

DIST-CO-RTE: 04-SM-280

PM: R21.3

EA: 0G710K

Program Code: SHOPP 201.113

III. RIGHT OF WAY ITEMS

	<u>Current Values (Future Use)</u>	<u>Escalation Rates</u>	<u>Escalated Values</u>
Acquisition, including Execss Lands	\$ -		
Utility Relocation (State Share)	\$ -		
Relocation Assistance	\$ -		
Clearance/Demolition	\$ -		
Title and Escrow Fees	\$ -		
TOTAL RIGHT OF WAY		\$	<u>5,000</u>

Attachment G

Storm Water Data Report (SWDR)



Dist-County-Route: 04-SM-280

Post Mile Limits: 21.3

Project Type: Seismic Retrofit for Over Crossing

Project EA: 0G710K

Program Identification: 20.xx.201.110

Phase: ☒ PID
☐ PA/ED
☐ PS&E

Regional Water Quality Control Board(s): Region 2 San Francisco

- | | | |
|---|------------------------------|--|
| 1. Is the project required to consider incorporating Treatment BMPs? | Yes <input type="checkbox"/> | No <input checked="" type="checkbox"/> |
| 2. Does the project disturb 5 or more acres of soil? | Yes <input type="checkbox"/> | No <input checked="" type="checkbox"/> |
| 3. Does the project disturb more than 1 acre of soil and not qualify for the Rainfall Erosivity Waiver? | Yes <input type="checkbox"/> | No <input checked="" type="checkbox"/> |
| 4. Does the project potentially create permanent water quality impacts? | Yes <input type="checkbox"/> | No <input checked="" type="checkbox"/> |
| 5. Does the project require a notification of ADL reuse | Yes <input type="checkbox"/> | No <input checked="" type="checkbox"/> |

If the answer to any of the preceding questions is "Yes", prepare a Long Form – Storm Water Data Report.

Estimate Construction Start Date: March 2014 Construction Completion Date: December 2014

Separate Dewatering Permit (if yes, permit number) Yes ☐ Permit # No ☒Erosivity Waiver Yes ☐ Date: No ☒

This Short Form – Storm Water Data Report has been prepared under the direction of the following Licensed Person. The Licensed Person attests to the technical information contained herein and the data upon which recommendations, conclusions, and decisions are based. Professional Engineer or Landscape Architect stamp required at PS&E.

9/14/2011

Choon Jiaw Shih, Registered Project Engineer

Date

I have reviewed the stormwater quality design issues and find this report to be complete, current and accurate:

09/14/2011

Norman Gonsalves, District/Regional SW Coordinator

Date

[Stamp Required for PS&E only]



1. Project Description

The project is a Seismic Retrofit Project which will fortify the Sneath Lane Overcrossing bridge by installing steel rods in the deck and steel jackets around the bent columns.

Sneath Lane Overcrossing: Sneath Lane Overcrossing is a continuous pre-stressed box girder bridge. Sneath Lane OC was built in 1971, has 4 spans and is 360 feet long. There are three Cast in Drilled Hole (CIDH) pile bents on which six concrete columns support the bridge span.

Caltrans will reinforce the Sneath Lane Overcrossing by installing reinforcement in the bridge deck and on the supporting columns which will provide tensile support that the bridge currently lacks. Hardened Steel (HS) rods will be drilled and secured latitudinally and longitudinally between each cell. The rods will reinforce the bridge by acting in tension in a seismic event. A class P/F column casing will secure the bents of the bridge and the off ramp. The column casing is essentially a steel jacket which is secured around a bent to add tensile strength. There will be no disturbed or reworked soil at the Sneath Lane Overcrossing.

There will be no disturbed soil area, no reworked area and no added impervious area.

The project lies in the San Mateo Bayside region, specifically Hydrological Sub Area 204.40 and drains into the San Francisco Bay, Central. The San Francisco Bay Central is on the Environmental Protection Agency (EPA) 303d list of impacted water bodies and has a Total Maximum Daily Load (TMDL) for Mercury.

2. Construction Site BMPs

A WPCP will be used since the project disturbs less than an acre of soil. Construction site management will be included as a separate bid line item. Other construction Best Management Practices (BMPs) are being considered such as Street Sweeping and Concrete Washout.

3. Required Attachments

Vicinity Map

Evaluation Documentation Form

District 4 Construction Concurrence Memo





Site Location ,SR 280
PM21.3

Evaluation Documentation Form

DATE: 09-12-2011_____

Project EA:OG710K_____

NO.	CRITERIA	YES ✓	NO ✓	SUPPLEMENTAL INFORMATION FOR EVALUATION
1.	Begin Project Evaluation regarding requirement for consideration of Treatment BMPs	✓		See Figure 4-1, Project Evaluation Process for Consideration of Permanent Treatment BMPs. Go to 2
2.	Is this an emergency project?		✓	If Yes , go to 10. If No , continue to 3.
3.	Have TMDLs or other Pollution Control Requirements been established for surface waters within the project limits? Information provided in the water quality assessment or equivalent document.		✓	If Yes , contact the District/Regional NPDES Coordinator to discuss the Department's obligations under the TMDL (if Applicable) or Pollution Control Requirements, go to 9 or 4. <i>ML</i> (Dist./Reg. SW Coordinator initials) If No , continue to 4.
4.	Is the project located within an area of a local MS4 Permittee?	✓		If Yes , (<i>San Mateo</i>), go to 5. If No , document in SWDR go to 5.
5.	Is the project directly or indirectly discharging to surface waters?	✓		If Yes , continue to 6. If No , go to 10.
6.	Is it a new facility or major reconstruction?		✓	If Yes , continue to 8. If No , go to 7.
7.	Will there be a change in line/grade or hydraulic capacity?		✓	If Yes , continue to 8. If No , go to 10.
8.	Does the project result in a <u>net increase of one acre or more of new impervious surface</u> ?		✓	If Yes , continue to 9. If No , go to 10. _____ (Net Increase New Impervious Surface)
9.	Project is required to consider approved Treatment BMPs.			See Sections 2.4 and either Section 5.5 or 6.5 for BMP Evaluation and Selection Process. Complete Checklist T-1 in this Appendix E.
10.	Project is not required to consider Treatment BMPs. _____ (Dist./Reg. Design SW Coord. Initials) <i>ML</i> Project Engineer Initials _____ (Date)	✓		Document for Project Files by completing this form, and attaching it to the SWDR.

1 See Figure 4-1, Project Evaluation Process for Consideration of Permanent Treatment BMPs



Memorandum

*Flex your power!
Be energy efficient!*

To: NORMAN GONSALVES
District Storm Water Coordinator
Office of Water Quality

Date: February 7, 2011

File:

From: DEPARTMENT OF TRANSPORTATION - District 4
Office of Construction Environmental Engineering Support

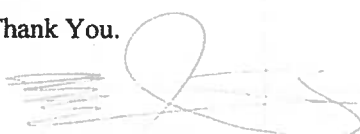
Subject: Division of Construction Concurrence with Storm Water Data Reports for WPCP Projects

This memo provides concurrence with your office's determination on Storm Water Data Reports for those projects that only require a Water Pollution Control Program (WPCP). However, WPCP projects that are located in environmentally sensitive areas or over a water body will still require review by my office.

The Office of Construction Environmental Engineering Support will review and provide input to all projects requiring a Storm Water Pollution Prevention Plan (SWPPP). Please ensure that adequate review time is provided for each of these projects.

If you have any comments or questions regarding this concurrence, please contact me at (510) 867-6007.

Thank You.



DRAGOMIR BOGDANIĆ, PE
Senior Transportation Engineer
Dist 4 Construction Storm Water Coordinator

Attachment H

STRAIN and BIRIS Report

STRUCTURE REPLACEMENT AND IMPROVEMENT NEEDS REPORT

SMS15010
MAY, 2011

District : 04

Bridge Number : 35 0204F
Feat Intersected: STATE ROUTE 1
Structure Name : SOUTH CONNECTOR OC (S1-S35 CONNECTOR)
Total Length: 109.1
Total Width : 12.5
Location : 04-SM-001-R46.65-DLC
Permit Rating: PPPPP
Rail Rating : 0000
Suff Rating : 95.00
Approach Width: 11.9

Item	Recom. Date	Project Type	Urgency Factor	Cost	Status	Tech. rank
1	04/12/2004	62 - Railing-Upgrade	6 years	\$396,880	8-Ten Year Pla	1.80

Project Details :

- 1 Replace the right bridge rail.

Bridge Number : 35 0225
Feat Intersected: INTERSTATE 280
Structure Name : SNEATH LANE OVERCROSSING
Total Length: 110
Total Width : 20.1
Location : 04-SM-280-R21.3-SBR
Permit Rating: PPPPP
Rail Rating : 1000
Suff Rating : 69.50
Approach Width: 15.8
FUNCTIONALLY OBSOLETE

Item	Recom. Date	Project Type	Urgency Factor	Cost	Status	Tech. rank
1	03/28/2007	70 - Seismic-Retrofit	2 years	\$1,106,000	1-Initiated	0.88

Project Details :

- 1 Columns flare steel into superstructure, non-ductile columns. Priority 4. Final Score 0.875.

Bridge Number : 35 0240
Feat Intersected: STATE ROUTE 1
Structure Name : SAN JOSE AVENUE POC
Total Length: 84.7
Total Width : 3
Location : 04-SM-001-R44.04-PFA
Permit Rating: NNNN
Rail Rating : NNNN
Suff Rating :
Approach Width:

Item	Recom. Date	Project Type	Urgency Factor	Cost	Status	Tech. rank
1	07/01/2002	80 - Bridge-Replace	2 years	\$400,000	8-Ten Year Pla	35.66
2	07/01/2000	AD - ADA Compliance Work	6 years		8-Ten Year Pla	23.66

Project Details :

- 1 This structure is saturated with salt and severely deteriorated due to the marine environment. The repairs recommended are cosmetic in nature and will not prevent further deterioration of the bridge. Replacement of the structure should be considered as soon as possible.
- 2 This structure has been identified as needing Americans with Disabilities Act (ADA) compliance work. Consult the District ADA coordinator for information on required modifications.

*California Department of Transportation
Division of Maintenance*

Structure Maintenance and Investigations

B_{RIDGE}

I_{NSPECTION}

R_{ECORDS}

I_{NFORMATION}

S_{YSTEM}

The requested documents have been generated by BIRIS.

These documents are the property of the California Department of Transportation and should be handled in accordance with Deputy Directive 55 and the State Administrative Manual.

Records for "Confidential" bridges may only be released outside the Department of Transportation upon execution of a confidentiality agreement.



DEPARTMENT OF TRANSPORTATION
Structure Maintenance & Investigations

Bridge Number : 35 0225
Facility Carried: SNEATH LANE
Location : 04-SM-280-R21.3-SBR
City : SAN BRUNO
Inspection Date : 06/29/2010

Bridge Inspection Report

Inspection Type

Routine ☒ FC ☐ Underwater ☐ Special ☐ Other ☐

STRUCTURE NAME: SNEATH LANE OVERCROSSING

CONSTRUCTION INFORMATION

Year Built : 1971

Skew (degrees): 26

Year Widened: N/A

No. of Joints : 0

Length (m) : 110

No. of Hinges : 0

Structure Description: CIP/PS box girder (9 cell) on RC (2) column bents and RC diaphragm abutments. The bents are founded on 1.82 m diameter concrete piles and the abutments are founded on 45 ton concrete piles.

Span Configuration : 1 @ 26.2 m, 2 @ 32.0 m, 1 @ 19.2 m

LOAD CAPACITY AND RATINGS

Design Live Load: MS-18 OR HS-20

Inventory Rating: 32.6 metric tonnes

Calculation Method: LOAD FACTOR

Operating Rating: 99.8 metric tonnes

Calculation Method: LOAD FACTOR

Permit Rating : PPPPP

Posting Load : Type 3: Legal

Type 3S2: Legal

Type 3-3: Legal

DESCRIPTION ON STRUCTURE

Deck X-Section: 0.3 m br, 1.8 m sw, 15.8 m, 1.8 m sw, 0.3 m br

Total Width: 20.1 m

Net Width: 15.8 m

No. of Lanes: 4

Rail Description: Type 5 M barrier

Rail Code : 1000

Min. Vertical Clearance: Unimpaired

DESCRIPTION UNDER STRUCTURE

Facility Name	Func Class	Lanes	Horiz Clr (m)	Vert Clr (m)
STATE ROUTE 280	11	9	25.70	5.18
SB 280 OFF-RAMP	14	2	15.20	5.26
E380 TO N280 ON-RAMP	14	1	10.80	5.33

Channel Description: This structure is not over a waterway.

CONDITION TEXT

WORK DONE

The deck has been treated with methacrylate under Contract No. 04-1E4204.

REVISIONS

ELI element #358, Deck Crack Smart Flag, has been upgraded to State 1.

CONDITION OF STRUCTURE

There are alligator cracks sized up to 0.07" wide with wheel ruts in the eastbound AC approach pavement at Abutment 5. The AC is now breaking up in the eastbound lanes and is cracking in the westbound lanes.

Printed on: Tuesday 09/14/2010 12:14 PM

35 0225/AAAF/18931

CONDITION TEXT

The AC approach at Abutments 1 and 5 is breaking up.

There are longitudinal cracks with efflorescence visible in the bottom right and left sides of the box girder near both abutments. The cracking is sized up to 1/32" wide and spaced at about 3' on center. The same type of cracks are visible in all spans.

There are diagonal deck cracks which are propagating from both abutments. They range in size from hairline to 1/16" wide and are spaced from 6" to 12" on center. The cracks are now filled with methacrylate.

There is a large, 1/16" wide transverse crack all the way through the concrete along the top of the slope paving at Abutment 5 extending the entire width of the abutment. The panel is offset vertically approximately 3". A portion of the top section of the slope paving at the left side of Abutment 5 is broken due to the erosion of the soil underneath the concrete paving.

There is a 0.04" wide transverse crack along the top of the slope paving at Abutment 1. The lower right panel of the slope protection at Abutment 1 is offset vertically 2".

LOAD CAPACITY

The load ratings for this structure are under review, and the results will be issued in a subsequent report.

MISCELLANEOUS

The accessible horizontal and vertical clearances beneath the structure were measured at the time of the inspection and were compared with the current vertical clearance diagram dated 2/15/2000. The measurements were recorded on a revised clearance diagram that is included with this report. The vertical and horizontal clearances have been revised in the database accordingly.

<u>ELEMENT INSPECTION RATINGS</u>									
F#Elem	Element Description	Env	Total Units	Qty in each Condition State					
			Qty	St. 1	St. 2	St. 3	St. 4	St. 5	
101 12	Concrete Deck - Bare	2	1750 sq.m.	1750	0	0	0	0	
101 104	P/S Conc Closed Web/Box Girder	2	110 m.	105	5	0	0		
101 205	Reinforced Conc Column or Pile Extension	2	6 ea.	6	0	0	0	0	
101 215	Reinforced Conc Abutment	2	37 m.	37	0	0	0	0	
101 227	Reinforced Conc Submerged Pile	2	1 ea.	1	0	0	0	0	
101 252	Cast-In-Drilled Hole Concrete Pile	2	1 ea.	1	0	0	0	0	
101 256	Slope Protection	2	2 ea.	0	1	1	0	0	
101 335	Other Bridge Railing	2	243 m.	243	0	0	0	0	
101 358	Deck Cracking	2	1 ea.	1	0	0	0		

WORK RECOMMENDATIONS

RecDate: 07/24/2007

EstCost:

Repair the AC approach at Abutment 1.

Action : Appr. Roadway-Repair

StrTarget: 2 YEARS

Work By: DISTRICT

DistTarget:

Status : PROPOSED

EA:

Printed on: Tuesday 09/14/2010 12:14 PM

35 0225/AAAF/18931

WORK RECOMMENDATIONS

RecDate: 03/28/2007	EstCost: \$1,106,000	Columns flare steel into superstructure,
Action : Seismic-Retrofit	StrTarget: 2 YEARS	non-ductile columns. Priority 4. Final
Work By: STRAIN	DistTarget:	Score 0.875.
Status : INITIATED	EA: 0G710K	
 RecDate: 07/13/2001	 EstCost:	 The AC approach pavement at Abutment 5
Action : Appr. Roadway-Repair	StrTarget: 2 YEARS	has severe cracks parallel with the
Work By: DISTRICT	DistTarget:	bridge deck. Seal the cracks in the AC
Status : PROPOSED	EA:	approach.
 RecDate: 06/18/1993	 EstCost:	 Repair the slope paving at Abutment 1 and
Action : Sub-Misc.	StrTarget: 2 YEARS	5.
Work By: DISTRICT	DistTarget:	
Status : PROPOSED	EA:	

Inspected By : AW.Corker/R.Odell


 Registered Civil Engineer



STRUCTURE INVENTORY AND APPRAISAL REPORT

***** IDENTIFICATION *****

(1) STATE NAME- CALIFORNIA 069
 (8) STRUCTURE NUMBER 35 0225
 (5) INVENTORY ROUTE(ON/UNDER) - UNDER A11002800
 (2) HIGHWAY AGENCY DISTRICT 04
 (3) COUNTY CODE 081 (4) PLACE CODE 65028
 (6) FEATURE INTERSECTED- INTERSTATE 280
 (7) FACILITY CARRIED- SNEATH LANE
 (9) LOCATION- 04-SM-280-R21.3-SBR
 (11) MILEPOINT/KILOMETERPOINT 321.3
 (12) BASE HIGHWAY NETWORK- PART OF NET 1
 (13) LRS INVENTORY ROUTE & SUBROUTE 000000028001
 (16) LATITUDE 37 DEG 37 MIN 49.4 SEC
 (17) LONGITUDE 122 DEG 26 MIN 05.6 SEC
 (98) BORDER BRIDGE STATE CODE % SHARE %
 (99) BORDER BRIDGE STRUCTURE NUMBER

***** STRUCTURE TYPE AND MATERIAL *****

(43) STRUCTURE TYPE MAIN:MATERIAL- PRSTR CONC CONT
 TYPE- BOX BEAM OR GIRDER - MULTI CODE 605
 (44) STRUCTURE TYPE APPR:MATERIAL- OTHER/NA
 TYPE- OTHER/NA CODE 000
 (45) NUMBER OF SPANS IN MAIN UNIT 4
 (46) NUMBER OF APPROACH SPANS 0
 (107) DECK STRUCTURE TYPE- CIP CONCRETE CODE 1
 (108) WEARING SURFACE / PROTECTIVE SYSTEM:
 A) TYPE OF WEARING SURFACE- NONE CODE 0
 B) TYPE OF MEMBRANE- NONE CODE 0
 C) TYPE OF DECK PROTECTION- NONE CODE 0

***** AGE AND SERVICE *****

(27) YEAR BUILT 1971
 (106) YEAR RECONSTRUCTED 0000
 (42) TYPE OF SERVICE: ON- CONNECTOR OC / 2ND I 6
 UNDER- HIGHWAY W/O PEDEST 1
 (28) LANES:ON STRUCTURE 04 UNDER STRUCTURE 09
 (29) AVERAGE DAILY TRAFFIC 156000
 (30) YEAR OF ADT 1998 (109) TRUCK ADT 5 %
 (19) BYPASS, DETOUR LENGTH 6 KM

***** GEOMETRIC DATA *****

(48) LENGTH OF MAXIMUM SPAN 32.0 M
 (49) STRUCTURE LENGTH 110.0 M
 (50) CURB OR SIDEWALK: LEFT 1.8 M RIGHT 1.8 M
 (51) BRIDGE ROADWAY WIDTH CURB TO CURB 15.8 M
 (52) DECK WIDTH OUT TO OUT 20.1 M
 (32) APPROACH ROADWAY WIDTH (W/SHOULDERS) 15.8 M
 (33) BRIDGE MEDIAN- NO MEDIAN 0
 (34) SKEW 26 DEG (35) STRUCTURE FLARED NO
 (10) INVENTORY ROUTE MIN VERT CLEAR 5.18 M
 (47) INVENTORY ROUTE TOTAL HORIZ CLEAR 25.7 M
 (53) MIN VERT CLEAR OVER BRIDGE RDWY 99.99 M
 (54) MIN VERT UNDERCLEAR REF- HIGHWAY 5.18 M
 (55) MIN LAT UNDERCLEAR RT REF- HIGHWAY 1.9 M
 (56) MIN LAT UNDERCLEAR LT 2.9 M

***** NAVIGATION DATA *****

(38) NAVIGATION CONTROL- NOT APPLICABLE CODE N
 (111) PIER PROTECTION- CODE
 (39) NAVIGATION VERTICAL CLEARANCE 0.0 M
 (116) VERT-LIFT BRIDGE NAV MIN VERT CLEAR M
 (40) NAVIGATION HORIZONTAL CLEARANCE 0.0 M

***** SUFFICIENCY RATING *****

SUFFICIENCY RATING = 69.5
 STATUS FUNCTIONALLY OBSOLETE
 HEALTH INDEX 99.4
 PAINT CONDITION INDEX = N/A

***** CLASSIFICATION ***** CODE

(112) NBIS BRIDGE LENGTH- YES Y
 (104) HIGHWAY SYSTEM- ROUTE ON NHS 1
 (26) FUNCTIONAL CLASS- INTSTAT PRIN ART URBAN 11
 (100) DEFENSE HIGHWAY- NOT STRAHNET 0
 (101) PARALLEL STRUCTURE- NONE EXISTS N
 (102) DIRECTION OF TRAFFIC- 2 WAY 2
 (103) TEMPORARY STRUCTURE-
 (105) FED.LANDS HWY- NOT APPLICABLE 0
 (110) DESIGNATED NATIONAL NETWORK - NOT ON NET 0
 (20) TOLL- ON FREE ROAD 3
 (21) MAINTAIN- STATE HIGHWAY AGENCY 01
 (22) OWNER- STATE HIGHWAY AGENCY 01
 (37) HISTORICAL SIGNIFICANCE- NOT ELIGIBLE 5

***** CONDITION ***** CODE

(58) DECK 7
 (59) SUPERSTRUCTURE 7
 (60) SUBSTRUCTURE 7
 (61) CHANNEL & CHANNEL PROTECTION N
 (62) CULVERTS N

***** LOAD RATING AND POSTING ***** CODE

(31) DESIGN LOAD- MS-18 OR HS-20 5
 (63) OPERATING RATING METHOD- LOAD FACTOR 1
 (64) OPERATING RATING- 99.8
 (65) INVENTORY RATING METHOD- LOAD FACTOR 1
 (66) INVENTORY RATING- 32.6
 (70) BRIDGE POSTING- EQUAL TO OR ABOVE LEGAL LOADS 5
 (41) STRUCTURE OPEN, POSTED OR CLOSED- A
 DESCRIPTION- OPEN, NO RESTRICTION

***** APPRAISAL ***** CODE

(67) STRUCTURAL EVALUATION 7
 (68) DECK GEOMETRY 4
 (69) UNDERCLEARANCES, VERTICAL & HORIZONTAL 3
 (71) WATER ADEQUACY N
 (72) APPROACH ROADWAY ALIGNMENT 8
 (36) TRAFFIC SAFETY FEATURES 1000
 (113) SCOUR CRITICAL BRIDGES N

***** PROPOSED IMPROVEMENTS *****

(75) TYPE OF WORK- SUP/SUB REHAB CODE 35
 (76) LENGTH OF STRUCTURE IMPROVEMENT 110 M
 (94) BRIDGE IMPROVEMENT COST \$2,213,000
 (95) ROADWAY IMPROVEMENT COST \$442,600
 (96) TOTAL PROJECT COST \$3,717,840
 (97) YEAR OF IMPROVEMENT COST ESTIMATE 2010
 (114) FUTURE ADT 252300
 (115) YEAR OF FUTURE ADT 2029

***** INSPECTIONS *****

(90) INSPECTION DATE 06/10 (91) FREQUENCY 24 MO
 (92) CRITICAL FEATURE INSPECTION: (93) CFI DATE
 A) FRACTURE CRIT DETAIL- NO MO A)
 B) UNDERWATER INSP- NO MO B)
 C) OTHER SPECIAL INSP- NO MO C)

Printed on: Tuesday 09/14/2010 12:14 PM

35 0225/AAAF/18931

Attachment I

Risk Management Plan

Project Risk Register

DIST-EA 04-0G710K					Project Name: Seismic Retrofit for Sneath Lane OC			Project Manager:		Date Created:			Last Updated:				
					Co - Rte - PM: San Mateo County 1/200PM R 21.3			Telephone:									
ITEM	ID #	Status	Threat / Opport-unity	Category	Date Risk Identified	Risk Description	Root Causes	Primary Objective	Overall Risk Rating	Cost/Time Impact Value	Risk Owner	Risk Trigger	Strategy	Response Actions w/ Pros & Cons	Adjusted Cost/Time Impact Value	WBS Item	Status Date and Review Comments
									1 1-Very Low (1-9%) Probability Impact								
1	04-0G710K-01	Active	Threat	ENV	05/16/11	Biological sensitive area	Design	TIME	2 Low Impact 1 -Very Low	Cost/Time Impact Value	PM	construction	MITIGATE	mitigation	Adjusted Cost/Time Impact Value	235 MITIGATE ENVIRONMENTAL IMPACTS AND CLEAN UP HAZARDOUS WASTE Additional WBS	
2	04-0G710K-02	Active	Threat	ORG	05/16/11	Project not programmed in the next SHOPP	PM	COST	3 Med Impact 4 -Med		PM	Project not a priority	Accept	Project cost estimate should be refreshed		185 PERFORM ENVIRONMENTAL STUDIES AND PREPARE DRAFT ENVIRONMENTAL DOCUMENT	
3	04-0G710K-03	Active	Threat	CON	05/17/11	Community rejection to lane closure	Design	SCOPE	2 Low Impact 2 -Low		PM	Conflict with community	MITIGATE	change work schedule		230 PREPARE DRAFT PS&E	
									Probability Impact								

Approved by: _____ date _____

Attachment J

Transportation Management Plan (TMP) Data Sheet

Memorandum

To: Barry Loo
District 4 Traffic Manager

Date: 3/11/2011

From: Robert Blanco, District Branch Chief
Office of Advance Planning, PSR II

Subject: Request for Transportation Management Plan Data Sheet.

Project Data

PROJECT MANAGER (Name)	(Calnet#)
Nick Saleh	(510) 286-6355
PROJECT ENGINEER (Name)	(Calnet#)
Frank Shih	(510) 622-1666
DIST-EA: 0G710K	PROGRAM (HB1, HE11, etc.): Bridge Reha. (201.113)
PROJECT COMMON NAME Seismic Retrofit	
CO-RTE-PM (KP): Sneath Lane OC (SM-280-PM R 21.3)	
LEGAL DESCRIPTION:	
DETAILED WORK DESCRIPTION: Install casing for Sneath Lane OC.	
CONSTRUCTION COST ESTIMATE: 0.8 millions	
PROJECT PHASE: PSSR <input type="checkbox"/> PR <input type="checkbox"/> PS&E <input type="checkbox"/> %	

Traffic Impact Description

A) The Project includes the following:
(Check applicable type of facility closures)

- ☐ Highway or freeway lanes
- ☐ Highway or freeway shoulders
- ☐ Freeway connectors
- ☐ Freeway off-ramps
- ☐ Freeway on-ramps
- ☐ Local streets

B) Major operations requiring traffic control and working days for each

<u>Operation</u>	<u># of working days</u>
<input type="checkbox"/> Clearing and grubbing	20
<input type="checkbox"/> Existing feature removal	
<input type="checkbox"/> Excavation of embankments construction	
<input type="checkbox"/> Structural section construction	45
<input type="checkbox"/> Drainage feature construction	10

- ☐ Structures construction _____
- ☐ MBGR/Barrier construction _____
- ☐ Striping _____
- ☐ Electrical component construction _____
- ☐ Other _____
- Total days requiring traffic control _____ 80 _____

C. Project staging description and # of working days required per stage:

<u>Stage Description</u>	<u># of working days per stage</u>
1. <u>Retrofit the Sneath Lane OC</u>	<u>80</u>
2. _____	_____
3. _____	_____
4. _____	_____

D. Have you considered any construction strategies that can restore existing number of lanes?

- ☐ Temporary Roadway Widening Structure Involvement?
Yes _____ No _____ if "yes", notify Project Manager
- ☐ Lane Restriping (Temporary narrow lane widths)
- ☐ Roadway Realignment (Detour around work area)
- ☐ Median and/or Right Shoulder Utilization
- ☐ Use of HOV lane as a Temporary Mixed Flow Lane
- ☐ Staging alternatives (Explain below)

Attachments

- Fact Sheet of the project
- As-Builts
- Location Maps
- Advance Planning Study

Frank Shih
Project Design Engine

510 622-1666
Contact Phone Number

Robert Blanco
Senior Engineer

TRANSPORTATION MANAGEMENT PLAN DATA SHEET

(Preliminary TMP Elements and Costs)

Co/Rte/PM SM-280,PMR 21.3 EA 0G710K Project Engineer Frank Shih

Project Limit Sneath Lane OC (SM-280-PM R 21.3)

Project Description Seismic Retrofit. Install casing for Sneath Lane OC.

1) Public Information

- | | | |
|-------------------------------------|--|---------|
| <input checked="" type="checkbox"/> | a. Brochures and Mailers | \$5,000 |
| <input checked="" type="checkbox"/> | b. Press Release | |
| <input type="checkbox"/> | c. Paid Advertising | \$ |
| <input type="checkbox"/> | d. Public Information Center/Kiosk | \$ |
| <input type="checkbox"/> | e. Public Meeting/Speakers Bureau | |
| <input type="checkbox"/> | f. Telephone Hotline | |
| <input checked="" type="checkbox"/> | g. Internet, E-mail | |
| <input type="checkbox"/> | h. Notification to impacted groups
(i.e. bicycle users, pedestrians with disabilities, others...) | |
| <input type="checkbox"/> | i. Others | \$ |

2) Motorist Information Strategies

- | | | |
|-------------------------------------|--|----------|
| <input type="checkbox"/> | a. Changeable Message Signs (Fixed) | \$ |
| <input checked="" type="checkbox"/> | b. Changeable Message Signs (Portable) | \$5,000 |
| <input checked="" type="checkbox"/> | c. Ground Mounted Signs | \$10,000 |
| <input type="checkbox"/> | d. Highway Advisory Radio | \$ |
| <input checked="" type="checkbox"/> | e. Caltrans Highway Information Network (CHIN) | |
| <input checked="" type="checkbox"/> | f. Detour maps (i.e. bicycle, vehicle, pedestrian...etc) | |
| <input type="checkbox"/> | g. Revised Transit Schedules/maps | |
| <input checked="" type="checkbox"/> | h. Bicycle community information | |
| <input type="checkbox"/> | i. Others | |

\$

3) Incident Management

- | | | |
|-------------------------------------|---|----------|
| <input checked="" type="checkbox"/> | a. Construction Zone Enhanced Enforcement
Program (COZEEP) | \$60,000 |
| <input checked="" type="checkbox"/> | b. Freeway Service Patrol | \$ |
| <input type="checkbox"/> | c. Traffic Management Team | |
| <input type="checkbox"/> | d. Helicopter Surveillance | \$ |
| <input type="checkbox"/> | e. Traffic Surveillance Stations
(Loop Detector and CCTV) | \$ |
| <input type="checkbox"/> | f. Others | \$ |

TMP Data Sheet (cont.)

4) Construction Strategies

- ☒ a. Lane Closure Chart
- ☐ b. Reversible Lanes
- ☒ c. Total Facility Closure
- ☐ d. Contra Flow
- ☐ e. Truck Traffic Restrictions
- ☐ f. Reduced Speed Zone
- ☐ g. Connector and Ramp Closures
- ☐ h. Incentive and Disincentive
- ☐ i. Moveable Barrier
- ☐ j. _____
- ☐ k. Others _____

\$ _____

\$ _____

\$ _____

\$ _____

\$ _____

5) Demand Management

- ☐ a. HOV Lanes/Ramps (New or Convert)
- ☐ b. Park and Ride Lots
- ☐ c. Rideshare Incentives
- ☐ d. Variable Work Hours
- ☐ e. Telecommute
- ☐ f. Ramp Metering (Temporary Installation)
- ☐ g. Ramp Metering (Modify Existing)
- ☐ h. Others _____

\$ _____

\$ _____

\$ _____

\$ _____

\$ _____

\$ _____

\$ _____

6) Alternate Route Strategies

- ☐ a. Add Capacity to Freeway Connector
- ☐ b. Street Improvement (widening, traffic signal... etc)
- ☐ c. Traffic Control Officers
- ☐ d. Parking Restrictions
- ☐ e. Others _____

\$ _____

\$ _____

\$ _____

\$ _____

\$ _____

7) Other Strategies

- ☐ a. Application of New Technology
- ☐ e. Others _____

\$ _____

\$ _____

TOTAL ESTIMATED COST OF TMP ELEMENTS =

\$80,000

*Please note that any change in project scope, schedule, or cost will require resubmittal of TMP Data Sheet request.

PREPARED BY

Lenka Pleskotova

DATE 3/23/11

APPROVAL RECOMMENDED BY

Shein Lin

DATE 3/23/11